

WE CLAIM:

1. A method for delivering a liquified gas to an engine, the method comprising:
 - providing a holding tank configured to receive and retain a liquified gas at saturated conditions;
 - providing a valve device in fluid communication with the tank;
 - directing the liquified gas from the tank to a first chamber in the valve device;
 - allowing the liquified gas in the first chamber to pass into a second chamber in the valve device in response to a first pressure condition;
 - directing the liquified gas in the second chamber to an engine;
 - allowing liquified gas vapor from the tank to pass into the second chamber in the valve device in response to a second pressure condition;
 - directing the liquified gas vapor in the second chamber to the engine; and
 - directing excess liquified gas from the first chamber back toward the tank for maintaining an operating pressure in the tank.
2. The method of claim 1, wherein the liquified gas is a fuel or an oxidizer.
3. The method of claim 2, wherein the fuel is selected from the group consisting of hydrogen, methane, ethane, propane, butane, natural gas, and mixtures thereof.
4. The method of claim 2, wherein the oxidizer is selected from the group

consisting of oxygen, fluorine, chlorine, and mixtures thereof.

5. The method of claim 1, wherein the valve device includes a proportioning spool for allowing the liquified gas or the liquified gas vapor to pass into the second chamber.